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DECLARATION UNDER 37 C.F.R. §1.131 Address to: Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450	Attorney Docket Confirmation No.	CLON015
	First Named Inventor	Chenchik et al.
	Application Number	09/440,829
	Filing Date	November 15, 1999
	Group Art Unit	1655
	Examiner Name	Forman, B.
	Title	*Long Oligonucleotide Arrays*

Sir:

This Declaration and the attached Exhibit are being submitted in conjunction with the Applicants' Response to the Final Rejection dated June 20, 2003.

I, Mark Lewis, do hereby declare as follows.

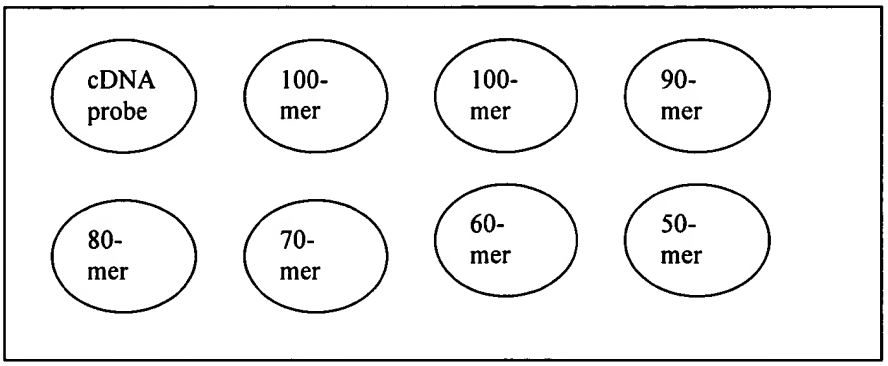
1. I am the General Manager of BD Biosciences Clontech. As such, I have the power to make declarations on behalf of the Assignee (Clontech Laboratories, Inc.) of the above-captioned application.

2. The inventors of the above-captioned application are not available to sign this declaration as the inventors are no longer employees of the Assignee of the above-captioned application. Accordingly, I am signing this declaration pursuant to MPEP § 715.04 (D).

3. Enclosed with this declaration are notebook pages of Alexander (Shura) Munishkin that provide evidence of conception and reduction to practice of the claimed invention prior to October 4, 1999.

4. Specifically, as evidenced by Exhibit A, a test array of 50-mer to 100-mer probes immobilized on a glass support for the target "C370" nucleic acid was

produced. Specifically, for the C370-2 nucleic acid, the array had 8 different probe spots. The probe spots were arranged on the array as follows:



As such, each different probe spot was made up of a specific length of probe molecule, i.e., 50 mers, 60 mers, 70 mers, 80 mers, 90 mers, 100 mers and, as a control, a cDNA probe (which is much longer). The resultant array was then contacted with labeled molecules prepared from polyA+ RNA placenta and a primer mix that included a primer specific for the C370 target of interest. Various hybridization conditions were evaluated and the results are provided on the second page of Exhibit A. As can be seen, it was readily appreciated that probes having a length of 60 to about 100 nt gave superior results to the longer probe cDNA probe, whose signal is much fainter than that yielded by the oligo probes. Specifically, the statement is made: **"Hybridization to Oligos is much more efficiently than to cDNA..."** The dates have been redacted from Exhibit A. All redacted dates are prior to October 4, 1999.

5. The evidence provided in Exhibit A establishes that an array having probes ranging in length from 60 to about 100 nt was conceived and reduced to practice prior to October 4, 1999.

6. I do hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to

be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: 11/18/03

Mark Lewis

Attachment: Exhibit A

F:\DOCUMENT\CLON\015\1.131 declaration by bochkariov.doc

Proj ct No.
54 Book No. TITLE Sizes of oligos for glass array.

r m Page N

For this experiment we have chosen c370_1 and c370_2 oligos as a brightest on last experiment

Order c370_1 (100 mer)
c370_1_90 (90 mer)
c370_1_80
c370_1_70
c370_1_60
c370_1_50 from Operon

Order c370_2 (100 mer)
c370_2_90
c370_2_80
c370_2_70
c370_2_60
c370_2_50 from HWG Company

c370_1
c370_2 gggtc agctgatcta cgagtctgcc atcacctgtg agtacctgga tgaagcatac ccagggaaga iaa
c370_1_90 agctgttgcc ggatgacccc tatgagaaag cttgc
c370_2_90 agctgatcta cgagtctgcc atcacctgtg agtacctgga tgaagcatac ccagggaaga agctgttgcc
c370_1_80 ggatgacccc tatgagaaag
c370_1_70
c370_1_60 c370_2_80 atcta cgagtctgcc atcacctgtg agtacctgga tgaagcatac ccagggaaga agctgttgcc
c370_1_50 ggatgacccc tatga
c370_2_70 cgagtctgcc atcacctgtg agtacctgga tgaagcatac ccagggaaga agctgttgcc
ggatgacccc
c370_2_60 ctgcc atcacctgtg agtacctgga tgaagcatac ccagggaaga agctgttgcc ggatg
c370_2_50 atcacctgtg agtacctgga tgaagcatac ccagggaaga agctgttgcc

To Page No.

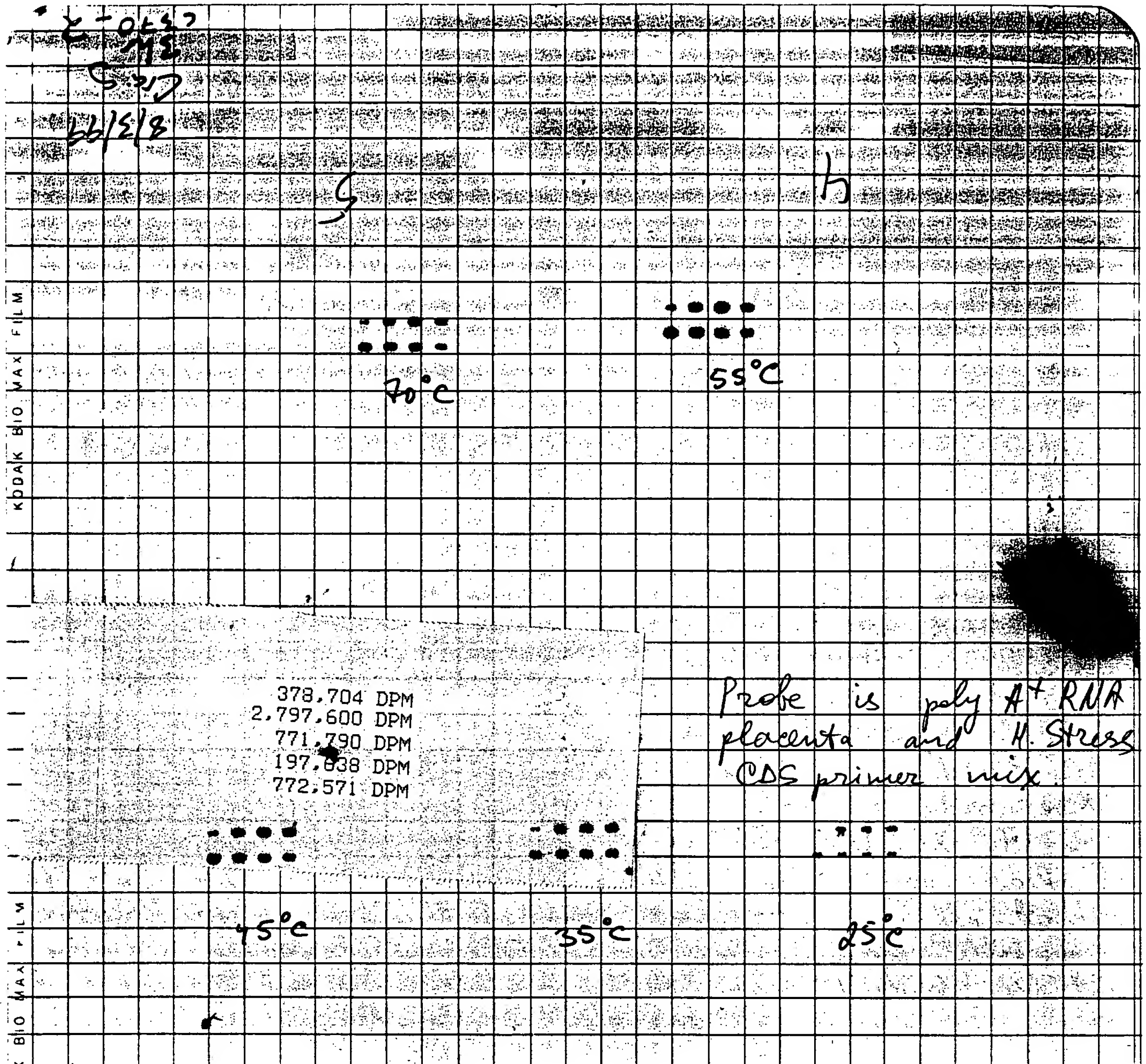
Witness d & Underst od by me,	Date	Invented by.	Date
x Fahidi		Recorded by Shura	

[redacted]

Project No.

Book No. TITLE *Hybridization at different conditions of oligos*

n Page No.



Oligos from HWG (c370_2) Hybridization to oligos is much more efficient than to cDNA (coordinates as for c370_1 on p155.
Optimal hybridization temperature is 55°C.
Probably later we have to go higher.

To Page No.

nessed & Understood by me,	Date	Invented by	Date
P. Fanidi		Recorded by *Shura*	

[redacted]